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19304 GSRS, MISSILE NUMBER 1136, ROUND NUMBER V-26, 7 MAY 1979.--ETC(U)
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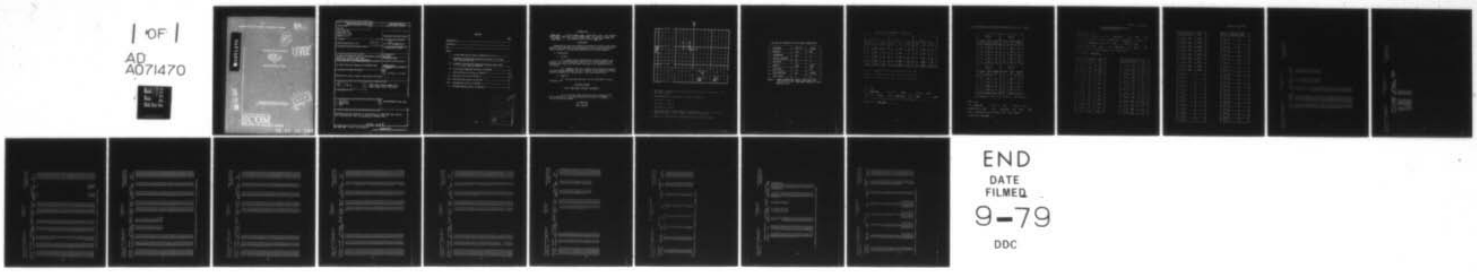

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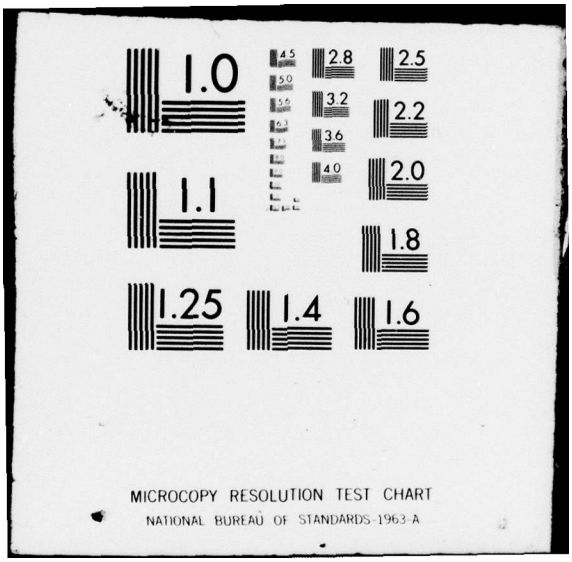
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

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DR 1010
MAY 1979
AD

LEVEL

METEOROLOGICAL DATA REPORT

19304 GSRS
Missile No. 1136
Round No. V-26
7 May 1979
by

WSMR Meteorological Team

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM
UNITED STATES ARMY ELECTRONICS COMMAND

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER: DR 1010
2. GOVT ACCESSION NO.
3. RECIPIENT'S CATALOG NUMBER

4. TITLE *(and Subtitle)*: 19304 GSRS (FA) Missile No. 1136 Round No. V-26
5. TYPE OF REPORT & PERIOD COVERED
6. PERFORMING ORG. REPORT NUMBER

7. AUTHOR(s): WSMR Meteorological Team (17) 02
8. CONTRACT OR GRANT NUMBER(s): (16) DA Task 1T665702D126-02

9. PERFORMING ORGANIZATION NAME AND ADDRESS
10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS

11. CONTROLLING OFFICE NAME AND ADDRESS: US Army Electronics Research & Development Comd (11) Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico
12. REPORT DATE: May 1979
13. NUMBER OF PAGES

14. MONITORING AGENCY NAME & ADDRESS *(if different from Controlling Office)*: US Army Electronics Research & Devopment Comd
15. SECURITY CLASS. *(of this report)*: UNCLASSIFIED
15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT *(of this Report)*

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(14) ERADCOM/ASL-DR-1010

17. DISTRIBUTION STATEMENT *(of the abstract entered in Block 20, if different from Report)*

(12) 21 p. (6) 19304 GSRS, Missile Number 1136, Round Number V-26, 7 May 1979.

18. SUPPLEMENTARY NOTES

19. KEY WORDS *(Continue on reverse side if necessary and identify by block number)*

1. Ballistics
2. Meteorology
3. Wind

(9) Meteorological data rept.

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

Meteorological data gathered for the launching of 19304 GSRS (FA), Missile No. 1136, Round No. V-26, are presented in tabular form.

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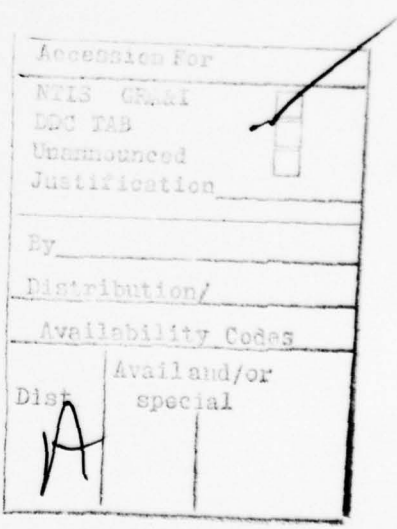
CONTENTS



INTRODUCTION

19304D GSRS , Missile Number 1136 , Round Number V-26 , was launched from LC-33 , White Sands Missile Range (WSMR), New Mexico, at 0830 MDT , 7 May 1979 . The scheduled launch time was 0830 MDT .

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

   a. Surface

   (1) Standard surface observations to include pressure, temperature (°C), relative humidity, dew point (°C), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

   (2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

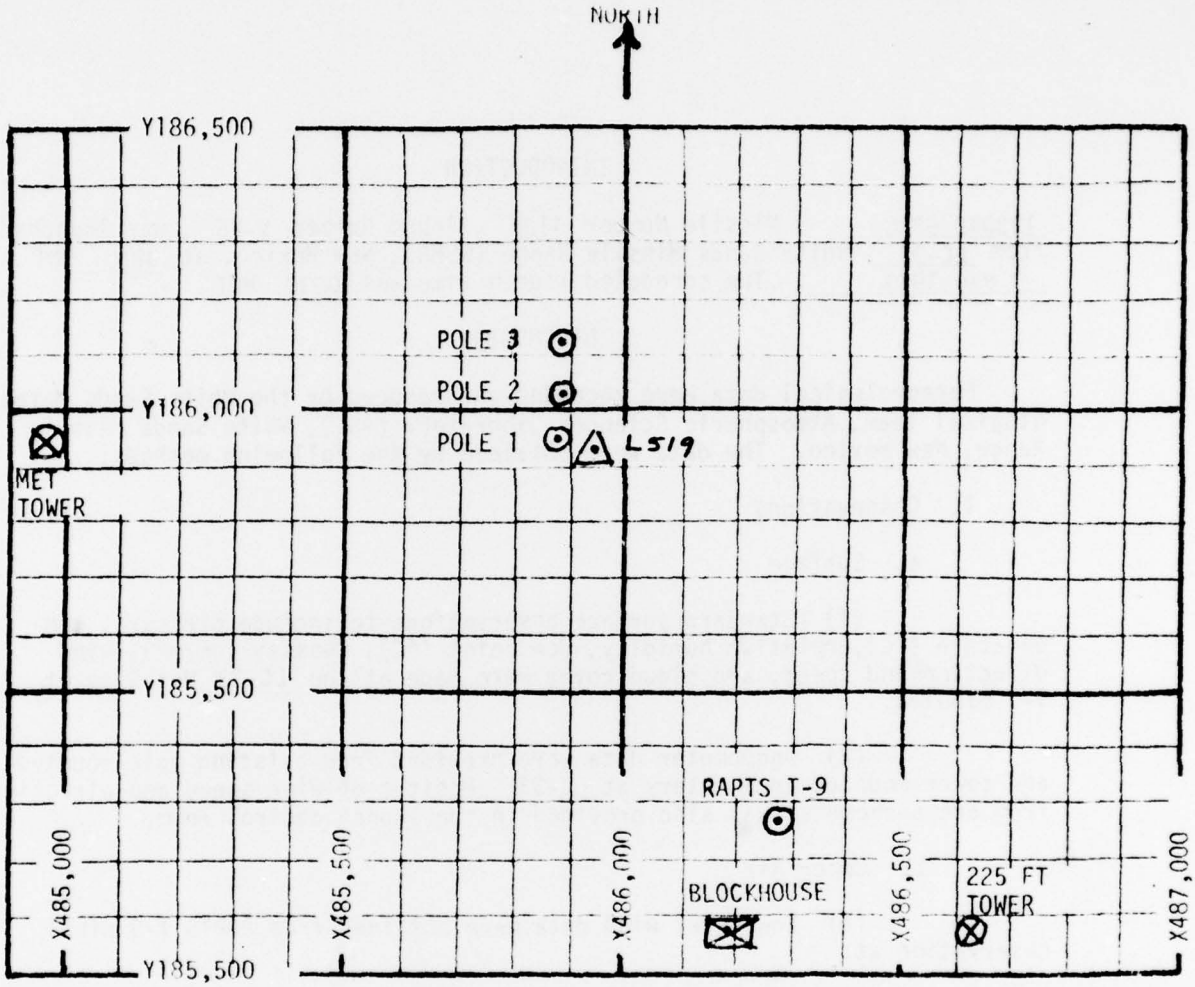
   b. Upper Air

   (1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

SITE AND ALTITUDE
LC-33 1020 meters (30-meter increments)

   (2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 117,000 feet in 500-feet increments.

SITE AND TIME
SMR 0730 MST



1. MET TOWER - 4 Bendix Model T-120 Anemometers at 12 ft, 62 ft, 102 ft and 202 ft with E/A recorders.

2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.

   (a) Pole #1 - 38.7 ft

   (b) Pole #2 - 53.0 ft

   (c) Pole #3 - 83.6 ft

3. 225 FT WIND TOWER - 5 Bendix Model T-120 Anemometers at 35 ft, 88 ft, 128 ft, 168 ft and 200 ft with 5 X-Y visual indicators in Blockhouse.

4. RAPTS T-9 - Radar Automatic Pilot-Balloon Tracking System T-9 Radar

The data are presented in the following tabulations:

ELEVATION	3977.30	FT/MSL
PRESSURE	872.9	MBS
TEMPERATURE	22.6	°C
RELATIVE HUMIDITY	16	%
DEW POINT	-4.7	°C
DENSITY	1025	GM/M^3
WIND SPEED	15	MPH
WIND DIRECTION	270	DEGREES
CLOUD COVER	2	Cs

TABLE I. SURFACE OBSERVATIONS TAKEN AT 0830 LOCAL TIME, 7 MAY 1979 AT LC-33, 19304D GSRS, MISSILE NO. 1136, ROUND NO. V-26.

LC33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1			POLE #2			POLE #3		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	282	27	-30	310	20	-30	279	36
-20	281	27	-20	305	18	-20	279	36
-10	282	31	-10	313	25	-10	276	32
0.0	277	21	0.0	297	20	0.0	283	30
+10	277	25	+10	298	24	+10	282	34

POLE #1 = X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL

POLE #2 = X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL

POLE #3 = X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL

TABLE III

TYPE 19304D GSRS MISSILE NO. 1136 ROUND NO. V-26

LAUNCHED FROM LC-33 DATE 7 May 1979 TIME 0830 MDT

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH

OR TRUE NORTH TRUE NORTH .

LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1 12 ft			LEVEL #2 62 ft		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	290	11	-30	260	35
-20	315	18	-20	271	37
-10	270	23	-10	281	35
0.0	287	23	0.0	275	34
+10	286	24	+10	267	35
LEVEL #3 102 ft			LEVEL #4 202 ft		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	275	31	-30	275	34
-20	284	38	-20	280	35
-10	288	35	-10	274	37
0.0	284	31	0.0	270	36
+10	294	26	+10	270	31

WTSM COORDINATES: X484,82.64 Y185,957.73 H3983.00 (base)

TABLE III

TYPE 19304D GSRS MISSILE NO. 1136 ROUND NO. V-26

LAUNCHED FROM LC-33 DATE 7 May 1979 TIME 0830 MDT

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH

OR TRUE NORTH TRUE NORTH .

PILOT BALLOON MEASURED WIND DATA
(30 meter increments)

TABLE IV

RELEASED FROM LC-33 DATE 7 May 1979 TIME 0830 MDT

RELEASE POINT COORDINATES (WSTM) X= 486,037.24 Y= 182,350.16 H= 3977.30

MISSILE TYPE 19304 GSRS MISSILE NO. 1136 ROUND NO. V-26

MISSILE LAUNCHED FROM LC-33 DATE 7 May 1979 TIME 0830 MDT

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH

OR TRUE NORTH TRUE NORTH.

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
SFC	270	15.0
30	272	15.5
60	274	16.0
90	276	17.0
120	278	17.5
150	279	26.5
180	280	35.5
210	279	35.5
240	277	35.0
270	276	36.5
300	275	37.5
330	277	34.5
360	278	31.5

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
390	279	33.0
420	279	34.5
450	276	33.0
480	272	31.0
510	264	28.5
540	256	26.0
570	257	25.0
600	258	23.5
630	259	23.5
660	260	23.0
690	263	23.5
720	266	23.5
750	269	24.5

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
780	272	25.5
810	268	27.0
840	264	28.5
870	256	31.0
900	247	33.5
930	244	34.5
960	241	35.0
990	246	34.5
1020	250	33.5
1050		
1080		
1110		
1140		
1170		
1200		
1230		
1260		
1290		
1320		
1350		
1380		
1410		

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
1440		
1470		
1500		
1530		
1560		
1590		
1620		
1650		
1680		
1710		
1740		
1770		
1800		
1830		
1860		
1890		
1920		
1950		
1980		
2010		
2040		
2070		

SIGNIFICANT LEVEL DATA
12700b0094
S M R

STATION ALTITUDE 3997.30 FEET MSL
7 MAY 79 0730 HRS MST
ASCENSION NO. 94

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
872.0	3997.3	21.0	-2.8	20.0
861.0	4355.9	18.9	-3.9	21.0
850.0	4717.7	18.6	-4.1	21.0
819.0	5758.0	16.2	-5.8	20.0
788.4	6818.8	15.7	-7.6	19.0
737.8	8549.7	10.9	-11.1	20.0
700.0	10079.4	7.1	-14.3	20.0
615.8	13506.5	1.7	-18.6	20.0
606.8	13895.6	.5	-20.4	19.0
598.0	14284.2	5.4	-17.0	18.0
563.2	15882.8	1.6	-20.1	18.0
500.0	18967.9	-6.5	-26.2	19.0
465.6	20802.2	-11.6	-30.0	20.0
450.2	21645.6	-14.4	-30.0	25.0
400.0	24547.6	-22.6	-35.3	30.0
371.0	26350.7	-26.7	-39.3	29.0
324.8	29455.7	-35.3	-46.9	29.0
300.0	31260.3	-39.6	-50.6	30.0
282.2	32628.0	-42.8		
250.0	35279.7	-49.7		
227.4	37297.7	-55.1		
207.4	39216.6	-59.2		
200.0	39967.7	-58.7		
188.4	41197.8	-61.0		
166.2	43764.4	-61.2		
157.8	44821.8	-62.8		
150.0	45855.9	-61.0		
138.0	47557.0	-62.8		
134.2	48122.0	-64.5		
119.4	50464.9	-66.7		
105.6	52988.8	-71.1		
100.0	53952.8	-71.1		
95.6	54845.4	-64.7		
86.6	56966.8	-58.6		
71.6	60760.1	-64.3		
70.0	61220.0	-61.2		
63.2	63332.2	-57.7		
55.0	66217.4	-59.4		
53.6	66754.1	-56.7		
50.0	68213.1	-55.9		

SIGNIFICANT LEVEL DATA

STATION ALTITUDE 3997.30 FEET MSL
7 MAY 79 0730 HRS MST
ASCENSION NO. 94

1270060094
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT	REL.HUM. PERCENT
44.4	70709.0	-56.2		
41.8	71980.7	-54.7		
30.0	79068.7	-50.3		
20.0	87973.4	-42.8		
13.4	96943.2	-41.7		
11.1	101249.4	-33.4		
10.0	103670.1	-33.1		
7.0	111925.2	-34.7		
6.8	112600.7	-32.0		
5.6	117171.0	-30.0		

UPPER AIR DATA
1270060094
S M R

STATION ALTITUDE 3997.30 FEET MSL
7 MAY 79 0730 HRS MST
ASCENSION NO. 94

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3997.3	872.0	21.0	-2.8	20.0	1030.5	668.9	240.0	14.0	1.000251
4000.0	871.9	21.0	-2.8	20.0	1030.5	668.9			1.000251
4500.0	856.6	18.8	-4.0	21.0	1020.1	666.3			1.000248
5000.0	841.5	17.9	-4.8	20.7	1005.1	665.3			1.000243
5500.0	826.6	16.8	-6.1	20.2	991.4	664.0			1.000238
6000.0	811.9	16.1	-7.0	19.8	976.3	663.1			1.000234
6500.0	797.5	15.9	-7.5	19.3	959.7	662.8			1.000230
7000.0	783.2	15.2	-8.2	19.1	944.7	662.1			1.000226
7500.0	769.2	13.9	-9.1	19.4	932.0	660.6			1.000222
8000.0	755.4	12.6	-10.0	19.6	919.6	659.0			1.000218
8500.0	741.8	11.3	-10.9	19.9	907.3	657.5			1.000215
9000.0	728.4	10.0	-11.9	20.0	895.1	655.9			1.000211
9500.0	715.1	8.6	-13.0	20.0	883.0	654.4			1.000207
10000.0	702.0	7.3	-14.1	20.0	871.1	652.8			1.000204
10500.0	689.1	6.4	-14.9	20.0	857.7	651.8			1.000200
11000.0	676.3	5.6	-15.5	20.0	844.2	650.8			1.000197
11500.0	663.8	4.9	-16.2	20.0	830.9	649.9			1.000194
12000.0	651.5	4.1	-16.8	20.0	817.9	649.0			1.000190
12500.0	639.4	3.3	-17.5	20.0	805.1	648.0			1.000187
13000.0	627.6	2.5	-18.1	20.0	792.4	647.1			1.000184
13500.0	616.0	1.7	-18.8	20.0	780.0	646.2			1.000181
14000.0	604.4	1.8	-19.5	18.7	765.1	646.3			1.000177
14500.0	593.2	4.9	-17.4	18.0	742.5	649.9			1.000173
15000.0	582.2	3.7	-18.4	18.0	731.9	648.5			1.000170
15500.0	571.3	2.5	-19.4	18.0	721.4	647.1			1.000167
16000.0	560.7	1.3	-20.3	18.0	711.1	645.7			1.000164
16500.0	550.0	-.0	-21.3	18.2	701.0	644.1			1.000162
17000.0	539.6	-1.3	-22.3	18.4	691.0	642.5			1.000159
17500.0	529.3	-2.6	-23.3	18.5	681.2	641.0			1.000157
18000.0	519.3	-3.9	-24.3	18.7	671.5	639.4			1.000154
18500.0	509.4	-5.2	-25.3	18.8	662.0	637.9			1.000152
19000.0	499.8	-6.5	-26.3	19.0	652.6	636.3			1.000149
19500.0	490.0	-7.9	-27.3	19.3	643.4	634.8			1.000147
20000.0	480.5	-9.3	-28.3	19.6	634.2	633.9			1.000144
20500.0	471.2	-10.8	-29.3	19.8	625.3	631.2			1.000142
21000.0	461.9	-12.3	-29.9	21.2	616.6	629.4	13.8	205.7	1.000140
21500.0	452.8	-13.9	-30.0	24.1	608.3	627.4	20.0	103.6	1.000138
22000.0	443.7	-15.4	-30.6	25.6	599.5	625.6	24.7	54.9	1.000136
22500.0	434.8	-16.8	-31.5	26.5	590.7	623.9	25.2	25.6	1.000134
23000.0	426.0	-18.2	-32.4	27.3	582.0	622.1	357.4	11.0	1.000132

AX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

10

UPPER AIR DATA
1270060094
S M R

STATION ALTITUDE 3997.30 FEET MSL
7 MAY 79 0730 HRS MST
ASCENSION NO. 94

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	417.4	-19.6	-33.4	28.2	573.4	620.4	301.2	9.6	1.000130
24000.0	409.0	-21.1	-34.3	29.1	565.0	618.6	274.9	15.1	1.000128
24500.0	400.8	-22.5	-35.2	29.9	556.8	616.9	267.1	21.3	1.000126
25000.0	392.5	-23.6	-36.3	29.7	547.9	615.5	264.3	26.9	1.000124
25500.0	384.4	-24.8	-37.4	29.5	539.0	614.1	262.8	30.8	1.000122
26000.0	376.5	-25.9	-38.5	29.2	530.3	612.6	261.8	33.6	1.000119
26500.0	368.6	-27.1	-39.7	29.0	521.9	611.1	261.2	35.5	1.000117
27000.0	360.8	-28.5	-40.9	29.0	513.7	609.4	261.0	36.5	1.000115
27500.0	353.2	-29.9	-42.1	29.0	505.7	607.7	261.2	36.7	1.000114
28000.0	345.7	-31.3	-43.3	29.0	497.8	605.9	262.0	34.4	1.000112
28500.0	338.4	-32.7	-44.6	29.0	490.1	604.2	263.3	31.2	1.000110
29000.0	331.2	-34.0	-45.8	29.0	482.5	602.4	266.5	27.1	1.000108
29500.0	324.2	-35.4	-47.0	29.0	475.0	600.7	270.3	24.3	1.000106
30000.0	317.1	-36.7	-48.0	29.3	467.1	599.1	273.6	23.2	1.000105
30500.0	310.2	-37.9	-49.1	29.6	459.3	597.5	272.7	24.7	1.000103
31000.0	303.5	-39.2	-50.1	29.9	451.7	596.0	270.7	26.9	1.000101
31500.0	296.8	-40.3	-52.7	24.7**	444.1	594.5	268.3	29.9	1.000099
32000.0	290.2	-41.4	-58.4	13.8**	436.3	593.0	267.3	32.8	1.000097
32500.0	283.8	-42.5	-70.8	2.8**	428.7	591.6	266.6	35.7	1.000096
33000.0	277.4	-43.8			421.4	590.0	266.2	38.4	1.000094
33500.0	271.2	-45.1			414.2	588.4	265.9	39.9	1.000092
34000.0	265.1	-46.4			407.2	586.7	265.8	40.7	1.000091
34500.0	259.1	-47.7			400.3	585.0	266.8	40.4	1.000089
35000.0	253.2	-49.0			393.5	583.3	267.7	42.8	1.000088
35500.0	247.4	-50.3			386.8	581.6	268.3	45.3	1.000086
36000.0	241.7	-51.6			380.1	579.8	268.7	47.5	1.000085
36500.0	236.1	-53.0			373.5	578.1	269.6	46.9	1.000083
37000.0	230.6	-54.3			367.1	576.3	270.8	45.1	1.000082
37500.0	225.2	-55.5			360.5	574.7	272.0	42.2	1.000080
38000.0	219.9	-56.6			353.7	573.3	273.2	38.6	1.000079
38500.0	214.7	-57.7			347.0	571.9	273.9	35.6	1.000077
39000.0	209.6	-58.7			340.5	570.5	274.4	32.9	1.000076
39500.0	204.6	-59.0			332.8	570.1	273.1	34.4	1.000074
40000.0	199.7	-58.8			324.5	570.4	271.7	36.9	1.000072
40500.0	194.9	-59.7			316.1	569.2	269.0	40.7	1.000071
41000.0	190.2	-60.6			311.8	567.9	266.8	44.6	1.000069
41500.0	185.6	-61.0			304.9	567.4	264.7	46.5	1.000068
42000.0	181.2	-61.1			297.6	567.4	262.6	47.0	1.000066
42500.0	176.8	-61.1			290.4	567.3	260.6	47.5	1.000065
43000.0	172.5	-61.1			283.5	567.2	258.6	47.0	1.000063

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA
1270060094
S M R

STATION ALTITUDE 3997.30 FEET MSL
7 MAY 79 0730 HRS MST
ASCENSION NO. 94

GEODETIC COORDINATES
32.46034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
43500.0	168.4	-61.2			276.7	567.2	250.5	46.7	1.000062
44000.0	164.3	-61.6			270.5	566.7	254.6	47.2	1.000060
44500.0	160.3	-62.3			264.9	565.7	252.8	48.0	1.000059
45000.0	156.4	-62.5			258.7	565.4	251.1	49.0	1.000058
45500.0	152.6	-61.6			251.4	566.6	249.5	50.1	1.000056
46000.0	148.9	-61.2			244.8	567.2	247.7	51.1	1.000055
46500.0	145.3	-61.7			239.4	566.5	245.5	51.9	1.000053
47000.0	141.8	-62.2			234.2	565.8	243.4	52.8	1.000052
47500.0	138.4	-62.7			229.1	565.1	241.6	53.1	1.000051
48000.0	135.0	-64.1			225.0	563.2	239.8	53.5	1.000050
48500.0	131.7	-64.9			220.3	562.3	240.1	53.3	1.000049
49000.0	128.5	-65.3			215.3	561.6	241.1	52.8	1.000048
49500.0	125.3	-65.8			210.5	561.0	242.8	52.0	1.000047
50000.0	122.2	-66.3			205.8	560.4	245.4	50.8	1.000046
50500.0	119.2	-66.8			201.2	559.7	247.9	49.6	1.000045
51000.0	116.2	-67.7			197.0	558.4	249.3	47.7	1.000044
51500.0	113.3	-68.6			192.9	557.2	250.9	45.8	1.000043
52000.0	110.5	-69.5			188.9	556.0	251.5	43.7	1.000042
52500.0	107.7	-70.4			185.0	554.7	252.2	41.7	1.000041
53000.0	105.0	-71.1			181.0	553.8	252.8	41.0	1.000040
53500.0	102.3	-71.1			176.5	553.8	253.4	40.4	1.000039
54000.0	99.8	-70.8			171.7	554.2	254.4	40.8	1.000038
54500.0	97.3	-67.2			164.5	559.1	255.4	41.6	1.000037
55000.0	94.9	-64.2			158.2	563.1	257.5	42.8	1.000035
55500.0	92.6	-62.7			153.3	565.1	260.0	44.2	1.000034
56000.0	90.4	-61.2			148.5	567.1	262.5	45.9	1.000033
56500.0	88.2	-59.7			143.9	569.2	264.9	48.1	1.000032
57000.0	86.0	-58.8			139.8	570.4	267.0	50.4	1.000031
57500.0	84.0	-59.5			136.9	569.4	268.6	52.9	1.000030
58000.0	81.9	-60.3			134.1	568.4	270.0	55.3	1.000030
58500.0	80.0	-61.0			131.3	567.4	272.7	56.1	1.000029
59000.0	78.0	-61.7			128.6	566.5	275.4	57.0	1.000029
59500.0	76.1	-62.5			125.9	565.5	277.3	52.3	1.000028
60000.0	74.3	-63.2			123.3	564.5	279.5	46.9	1.000027
60500.0	72.5	-63.9			120.7	563.5	277.5	38.9	1.000027
61000.0	70.8	-62.7			117.1	565.2	272.2	30.4	1.000026
61500.0	69.1	-60.7			113.3	567.8	264.3	24.7	1.000025
62000.0	67.4	-59.9			110.1	568.9	253.5	20.8	1.000025
62500.0	65.8	-59.1			107.1	570.0	244.1	17.4	1.000024
63000.0	64.2	-58.3			104.1	571.1	237.7	14.0	1.000023

UPPER AIR DATA
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GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
63500.0	62.7	-57.8			101.4	571.7	228.9	11.0	1.000023
64000.0	61.2	-58.1			99.1	571.3	221.3	8.9	1.000022
64500.0	59.7	-58.4			96.9	570.9	209.5	7.0	1.000022
65000.0	58.3	-58.7			94.7	570.5	215.0	7.6	1.000021
65500.0	56.9	-59.0			92.6	570.1	220.2	8.3	1.000021
66000.0	55.6	-59.3			90.5	569.7	231.3	9.6	1.000020
66500.0	54.3	-58.0			87.6	571.5	241.5	11.6	1.000020
67000.0	53.0	-56.6			85.2	573.3	248.6	13.7	1.000019
67500.0	51.7	-56.3			83.1	573.7	253.7	16.0	1.000019
68000.0	50.5	-56.0			81.0	574.1	256.9	17.6	1.000018
68500.0	49.3	-55.9			79.1	574.2	257.9	17.2	1.000018
69000.0	48.2	-56.0			77.3	574.1	258.8	16.6	1.000017
69500.0	47.0	-56.1			75.5	574.0	254.3	12.4	1.000017
70000.0	45.9	-56.1			73.7	573.9	245.5	8.4	1.000016
70500.0	44.8	-56.2			72.0	573.9	212.2	5.9	1.000016
71000.0	43.8	-55.9			70.2	574.3	168.2	6.9	1.000016
71500.0	42.8	-55.3			68.4	575.1	153.5	9.7	1.000015
72000.0	41.8	-54.7			66.6	575.8	150.2	12.2	1.000015
72500.0	40.8	-54.4			65.0	576.2	150.0	14.2	1.000014
73000.0	39.9	-54.1			63.4	576.6	153.8	15.1	1.000014
73500.0	38.9	-53.8			61.8	577.0	157.1	16.1	1.000014
74000.0	38.0	-53.4			60.3	577.4	166.5	15.5	1.000013
74500.0	37.2	-53.1			58.8	577.9	176.5	15.3	1.000013
75000.0	36.3	-52.8			57.4	578.3	186.6	14.6	1.000013
75500.0	35.5	-52.5			56.0	578.7	197.9	13.8	1.000012
76000.0	34.6	-52.2			54.6	579.1	210.2	13.0	1.000012
76500.0	33.8	-51.9			53.3	579.5	220.1	11.3	1.000012
77000.0	33.0	-51.6			52.0	579.9	245.6	10.7	1.000012
77500.0	32.3	-51.3			50.7	580.3	265.9	10.2	1.000011
78000.0	31.5	-51.0			49.4	580.7	285.8	10.9	1.000011
78500.0	30.8	-50.7			48.2	581.1	294.9	12.0	1.000011
79000.0	30.1	-50.3			47.1	581.5	297.9	12.7	1.000010
79500.0	29.4	-49.9			45.9	582.0	299.5	12.3	1.000010
80000.0	28.8	-49.5			44.8	582.6	294.4	7.8	1.000010
80500.0	28.1	-49.1			43.7	583.1	277.0	3.6	1.000010
81000.0	27.5	-48.7			42.6	583.7	170.9	2.2	1.000009
81500.0	26.9	-48.3			41.6	584.2	130.6	6.4	1.000009
82000.0	26.3	-47.8			40.6	584.8	130.2	11.0	1.000009
82500.0	25.7	-47.4			39.6	585.3	139.0	11.0	1.000009
83000.0	25.1	-47.0			38.6	585.9	148.6	11.0	1.000009

UPPER AIR DATA

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ASCENSION NO. 94

1270060094
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GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
83500.0	24.5	-46.6			37.7	586.4	156.7	11.2	1.000008
84000.0	24.0	-46.1			36.8	587.0	160.7	11.0	1.000008
84500.0	23.4	-45.7			35.9	587.5	164.6	10.9	1.000008
85000.0	22.9	-45.3			35.0	588.1	164.7	12.1	1.000008
85500.0	22.4	-44.9			34.2	588.6	161.7	14.4	1.000008
86000.0	21.9	-44.5			33.3	589.1	159.6	16.8	1.000007
86500.0	21.4	-44.0			32.5	589.7	160.8	17.3	1.000007
87000.0	20.9	-43.6			31.7	590.2	162.7	17.4	1.000007
87500.0	20.4	-43.2			31.0	590.8	164.8	17.1	1.000007
88000.0	20.0	-42.8			30.2	591.3	171.0	13.3	1.000007
88500.0	19.5	-42.7			29.5	591.4	181.9	9.8	1.000007
89000.0	19.1	-42.7			28.9	591.4	196.9	8.0	1.000006
89500.0	18.7	-42.6			28.2	591.5	204.6	8.5	1.000006
90000.0	18.3	-42.6			27.6	591.6	211.3	9.2	1.000006
90500.0	17.9	-42.5			27.0	591.7	210.5	7.2	1.000006
91000.0	17.5	-42.4			26.4	591.8	192.4	3.1	1.000006
91500.0	17.1	-42.4			25.8	591.8	89.0	2.3	1.000006
92000.0	16.7	-42.3			25.2	591.9	55.9	5.2	1.000006
92500.0	16.3	-42.2			24.7	592.0	46.7	8.4	1.000005
93000.0	16.0	-42.2			24.1	592.1	42.9	11.5	1.000005
93500.0	15.6	-42.1			23.6	592.1	46.0	9.8	1.000005
94000.0	15.3	-42.1			23.0	592.2	50.4	8.0	1.000005
94500.0	14.9	-42.0			22.5	592.3	57.3	6.3	1.000005
95000.0	14.6	-41.9			22.0	592.4	60.3	6.0	1.000005
95500.0	14.3	-41.9			21.5	592.5	63.6	5.7	1.000005
96000.0	14.0	-41.8			21.0	592.5	67.3	5.4	1.000005
96500.0	13.7	-41.8			20.6	592.6	63.0	4.8	1.000005
97000.0	13.4	-41.6			20.1	592.8	55.2	4.3	1.000004
97500.0	13.1	-40.6			19.6	594.1	45.3	3.8	1.000004
98000.0	12.8	-39.7			19.1	595.3	39.8	3.9	1.000004
98500.0	12.5	-38.7			18.6	596.5	38.6	4.5	1.000004
99000.0	12.2	-37.7			18.1	597.7	37.6	5.0	1.000004
99500.0	11.9	-36.8			17.7	599.0	35.1	4.9	1.000004
100000.0	11.6	-35.8			17.2	600.2	27.5	3.8	1.000004
100500.0	11.5	-34.8			16.8	601.4	14.1	2.8	1.000004
101000.0	11.2	-33.9			16.3	602.6	352.5	2.0	1.000004
101500.0	11.0	-33.6			16.0	603.0	258.5	.1	1.000004
102000.0	10.7	-33.9			15.6	602.6	176.3	2.0	1.000003
102500.0	10.5	-34.3			15.3	602.1	175.3	4.0	1.000003
103000.0	10.3	-34.6			15.0	601.7	177.3	6.5	1.000003

UPPER AIR DATA
12700o0094
S M R

STATION ALTITUDE 3997.30 FEET MSL
7 MAY 79 0730 HRS MST
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GEODETIC COORDINATES
32.46034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
103500.0	10.1	-35.0			14.7	601.2	178.5	9.2	1.000003
104000.0	9.9	-35.1			14.4	601.1	179.2	12.0	1.000003
104500.0	9.6	-35.1			14.1	601.1	179.8	14.0	1.000003
105000.0	9.4	-35.0			13.8	601.2	180.4	15.4	1.000003
105500.0	9.2	-35.0			13.5	601.2	180.9	16.8	1.000003
106000.0	9.0	-35.0			13.2	601.2	179.7	17.7	1.000003
106500.0	8.8	-35.0			12.9	601.2	172.2	17.4	1.000003
107000.0	8.7	-34.9			12.7	601.3	164.5	17.3	1.000003
107500.0	8.5	-34.9			12.4	601.3	157.0	17.6	1.000003
108000.0	8.3	-34.9			12.1	601.3	158.3	16.3	1.000003
108500.0	8.1	-34.9			11.9	601.4	160.8	14.9	1.000003
109000.0	7.9	-34.8			11.6	601.4	163.6	13.5	1.000003
109500.0	7.8	-34.8			11.4	601.4	160.0	11.8	1.000003
110000.0	7.6	-34.8			11.1	601.5	149.6	10.2	1.000002
110500.0	7.4	-34.8			10.9	601.5	135.9	9.0	1.000002
111000.0	7.3	-34.7			10.6	601.5	120.2	9.3	1.000002
111500.0	7.1	-34.7			10.4	601.6	109.5	11.7	1.000002
112000.0	7.0	-34.4			10.2	602.0	102.6	14.3	1.000002
112500.0	6.8	-32.4			9.9	604.5	98.0	17.0	1.000002
113000.0	6.7	-31.8			9.7	605.2	97.6	15.5	1.000002
113500.0	6.5	-31.6			9.4	605.5	97.2	14.0	1.000002
114000.0	6.4	-31.4			9.2	605.7	96.6	12.6	1.000002
114500.0	6.3	-31.2			9.0	606.0			1.000002
115000.0	6.1	-31.0			8.8	606.3			1.000002
115500.0	6.0	-30.7			8.6	606.6			1.000002
116000.0	5.9	-30.5			8.5	606.8			1.000002
116500.0	5.8	-30.3			8.3	607.1			1.000002
117000.0	5.6	-30.1			8.1	607.4			1.000002

MRN SIGNIFICANT LEVEL DATA

STATION ALTITUDE 3997.30 FEET MSL
7 MAY 79 0730 HRS MST
ASCENSION NO. 94

12700600094
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	WIND DATA DIRECTION DEG (TN)	SPEED MPS	N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
3550.	9999.**	9999.**	-9999.**	-9999.**	99	-30.0	5.600+0
3412.	98.	9.	1.	-9.	99	-32.0	6.800+0
3392.	103.	7.	2.	-7.	99	-34.7	7.000+0
3143.	179.	5.	5.	-0.	99	-35.1	1.000+1
3070.	350.	1.	-1.	0.	99	-33.4	1.110+1
2940.	56.	2.	-1.	-2.	99	-41.7	1.340+1
2669.	171.	7.	7.	-1.	99	-42.8	2.000+1
2400.	298.	7.	-3.	6.	99	-50.3	3.000+1
2185.	150.	6.	5.	-3.	99	-54.7	4.180+1
2147.	192.	3.	3.	1.	99	-56.2	4.440+1
2071.	257.	9.	2.	9.	99	-55.9	5.000+1
2027.	245.	7.	3.	6.	99	-56.7	5.360+1
2011.	236.	5.	3.	4.	99	-59.4	5.500+1
1924.	231.	6.	4.	5.	99	-57.7	6.320+1
1860.	269.	14.	0.	14.	99	-61.2	7.000+1
1846.	275.	18.	-2.	18.	99	-64.3	7.160+1
1728.	266.	26.	2.	26.	99	-58.6	8.660+1
1666.	257.	22.	5.	21.	99	-64.7	9.560+1
1639.	254.	21.	6.	20.	99	-71.1	1.000+2

** WIND DATA NOT COMPUTED DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

MANDATORY LEVELS

STATION ALTITUDE 3997.30 FEET MSL
7 MAY 79 0730 HRS MST
ASCENSION NO. 94

1270060094
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	4714.	18.6	-4.1	21.	9999.0	9999.0XX
800.0	6407.	15.9	-7.4	19.	9999.0	9999.0XX
750.0	8193.	12.1	-10.3	20.	9999.0	9999.0XX
700.0	10070.	7.1	-14.3	20.	9999.0	9999.0XX
650.0	12056.	4.0	-16.9	20.	9999.0	9999.0XX
600.0	14178.	4.3	-17.8	18.	9999.0	9999.0XX
550.0	16486.	-.0	-21.3	16.	9999.0	9999.0XX
500.0	18961.	-6.5	-26.2	19.	9999.0	9999.0XX
450.0	21624.	-14.4	-30.0	25.	23.8	78.3
400.0	24507.	-22.6	-35.3	30.	266.8	21.7
350.0	27674.	-30.5	-42.6	29.	261.4	36.3
300.0	31198.	-39.8	-50.6	30.	269.5	26.4
250.0	35203.	-49.7			268.1	44.3
200.0	39872.	-58.7			271.9	36.6
175.0	42600.	-61.1			259.8	47.3
150.0	45733.	-61.0			248.5	50.8
125.0	49407.	-65.8			242.9	52.0
100.0	53787.	-71.1			254.2	40.7
80.0	58310.	-61.0			272.6	56.1
70.0	61011.	-61.2			269.4	27.5
60.0	64184.	-58.3			212.8	7.4
50.0	67957.	-55.9			257.2	17.4
40.0	72623.	-54.1			152.9	14.9
30.0	78731.	-50.3			298.1	12.7
25.0	82665.	-46.9			148.5	11.0
20.0	87561.	-42.8			169.9	13.8
15.0	93940.	-42.0			55.1	6.8
10.0	103106.	-35.1			178.7	9.9
7.0	111273.	-34.7			104.1	13.6

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

MRN MANDATORY LEVELS
12700b0094
S M R

STATION ALTITUDE 3997.30 FEET MSL
7 MAY 79 0730 HRS MST
ASCENSION NO. 94

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	WIND DATA DIRECTION DEG (TN)	SPEED MPS	N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
3392.	104.	7.	2.	-7.	99	-34.7	7.000+0
3143.	179.	5.	5.	-0.	99	-35.1	1.000+1
2863.	55.	3.	-2.	-3.	99	-42.0	1.500+1
2669.	170.	7.	7.	-1.	99	-42.8	2.000+1
2520.	148.	6.	5.	-3.	99	-46.9	2.500+1
2400.	298.	7.	-3.	6.	99	-50.3	3.000+1
2214.	153.	8.	7.	-3.	99	-54.1	4.000+1
2071.	257.	9.	2.	9.	99	-55.9	5.000+1
1956.	213.	4.	3.	2.	99	-58.3	6.000+1
1860.	269.	14.	0.	14.	99	-61.2	7.000+1
1777.	273.	29.	-1.	29.	99	-61.0	8.000+1
1639.	254.	21.	6.	20.	99	-71.1	1.000+2
1506.	243.	27.	12.	24.	99	-65.8	1.250+2
1394.	248.	26.	10.	24.	99	-61.0	1.500+2
1298.	260.	24.	4.	24.	99	-61.1	1.750+2
1215.	272.	19.	-1.	19.	99	-58.7	2.000+2
1073.	268.	23.	1.	23.	99	-49.7	2.500+2
951.	269.	15.	0.	15.	11	-39.8	3.000+2
844.	261.	19.	3.	18.	12	-30.5	3.500+2
747.	267.	11.	1.	11.	13	-22.6	4.000+2
659.	24.	40.	-37.	-16.	16	-14.4	4.500+2
578.	9999.**	9999.**	-9999.**	-9999.**	20	-6.5	5.000+2
503.	9999.**	9999.**	-9999.**	-9999.**	21	-.0	5.500+2
432.	9999.**	9999.**	-9999.**	-9999.**	22	4.3	6.000+2
367.	9999.**	9999.**	-9999.**	-9999.**	21	4.0	6.500+2
307.	9999.**	9999.**	-9999.**	-9999.**	21	7.1	7.000+2
250.	9999.**	9999.**	-9999.**	-9999.**	22	12.1	7.500+2
195.	9999.**	9999.**	-9999.**	-9999.**	23	15.9	8.000+2
144.	9999.**	9999.**	-9999.**	-9999.**	23	18.6	8.500+2

** WIND DATA NOT COMPUTED DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.